9-23-05

PTO/SB/21 (08-03) Approved for use through 08/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE aperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/821,038 **TRANSMITTAL** Filing Date 4/7/2004 **FORM** First Named Inventor Art Unit 2631 (to be used for all correspondence after initial filing) **Examiner Name** Not yet assigned Attorney Docket Number 012.P3002 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance communication Fee Transmittal Form Drawing(s) to Technology Center (TC) **Appeal Communication to Board** Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC Petition (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please Terminal Disclaimer **Extension of Time Request** Identify below): 36 IDS Citations Request for Refund **Express Abandonment Request** CD, Number of CD(s) Information Disclosure Statement Remarks Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Michelle C. Craig, Reg. No. 52,776 Berkeley Law and Technology Group Individual name Signature Date CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Typed or printed name Jessica A. Harvey Signature

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Attimey's Docket No. 012.P3002

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of:

Li

Application No.: 10/821,038

Filed: 4/7/2004

For: METHOD OF OPERATING MULTI-ANTENNA WIRELESS DATA PROCESSING SYSTEM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1460 Examiner: Not Yet Assigned

Art Unit: 2631

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Jessica A. Harvey

Name of Person Transmitting Correspondence

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Sir:

In accordance with the duty of disclosure, enclosed is a copy of Information Disclosure Statement by Applicant (form PTO/SB/08B), which is being submitted before the mailing of the First Office Action. It is respectfully requested that the cited document(s) be considered and that the enclosed copy of PTO/SB/08B be initialed by the Examiner to indicate such consideration and a copy thereof returned to Applicant(s).

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

This Information Disclosure Statement is being submitted pursuant to 37 C.F.R. 1.97(b). Applicant(s) believe that no additional fees are required for this Information Disclosure Statement. However, if any additional fees are required in connection with this Information Disclosure Statement the commissioner is hereby authorized to charge such fees to our Deposit Account 50-3130.

Respectfully submitted,

BERKELEY LAW AND TECHNOLOGY GROUP, LLC

Dated:

Michelle C. Craig Reg. No. 52,776

1700 NW 167th Place, Suite 240

Beaverton, OR 97006 Phone: 503.439.6500

PTO/SB/08A (08-03)

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Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 5

 Complete if Known

 Application Number
 10/821,038

 Filing Date
 April 7, 2004

 First Named Inventor
 Li

 Art Unit
 2631

 Examiner Name
 not yet assigned

 Attorney Docket Number
 012,P3002

	L 0::			DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (d known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	^{US-} 4,635,063	01/06/1987	Chang et al.	
	2	^{US-} 5,028,931	07/02/1991	Ward	
	3	^{US-} 5,315,532	05/24/1994	Comon	
	4	^{US-} 5,383,164	01/17/1995	Sejnowski et al.	
	5	^{US-} 5,596,333	01/21/1997	Bruckert .	
	6	^{US-} 5,949,833	09/07/1999	Weerackody	
	7	^{US-} 5,959,966	09/28/1999	Torkkola	
	8	^{US-} 5,982,327	11/09/1999	Vook et al.	
	9	^{US-} 6,018,317	01/25/2000	Dogan et al.	
	10	^{US-} 6,128,276	10/03/2000	Agee	
	11	^{US-} 6,160,839	12/12/2000	Zhang	
	12	^{US-} 6,188,913	02/13/2001	Fukagawa et al.	·
	13	^{US-} 6,201,955	03/13/2001	Jasper et al.	
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	15	US- 6,298,082	10/02/2001	Harrison	
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	17	^{US-} 6,314,394	11/06/2001	Finn	
	18	^{US-} 6,321,200	11/20/2001	Casey	
	19	^{US-} 6,370,129	04/09/2002	Huang	

		FOREIC	GN PATENT DOCL	JMENTS		_
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	l
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Oilea Document	Or Relevant Figures Appear	T ⁶
	20	EP 1 152 548	07.11.2001	Lucent Technologies		
	21	WO 94/29967	22.12.1994	The Salk Institute		
	22	WO 98/37638	27.08.1998	AT&T Wireless		М
	23	WO 98/37654	27.08.1998	AT&T Wireless		
	24	WO 98/58450		Clarity, LLC		
	25	WO 98/59450				

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l	Signature			Considered		

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Complete if Known Substitute for form 1449/PTO Application Number 10/821,143 Filing Date April 7, 2004 INFORMATION DISCLOSURE First Named Inventor Li STATEMENT BY APPLICANT Art Unit 2631 (Use as many sheets as necessary) **Examiner Name**

not yet assigned Attorney Docket Number 012.P3001 Sheet 2

Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials*	No. ¹	Number-Kind Code ^{2 (d known)}	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	26	^{US-} 6,404,386	06/11/2002	Proctor, Jr. et al.	
	27	^{US-} 6,453,177	09/17/2002	Wong et al.	
	28	^{US-} 6,665,545	12/16/2003	Raleigh et al.	
	29	^{US-} 2001/0005685	06/28/2001	Nishimori et al.	
	30	^{US-} 2002/0101942	08/01/2002	Lindgren et al.	
	31	^{US-} 2003/0072382	04/17/2003	Raleigh et al.	
	32	^{US-} 2003/0220112	11/27/2003	Bugeja	
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	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages		
		Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶	
•	33	WO 99/10993	04.03.1999	Nokia Telecommunications			
	34	WO 99/55030	28.10.1999	Telecordia Tech.			
	35	WO 00/33526	08.06.2000	Ericsson, Inc.			
	36	WO 01/65725	07.09.2001	Nokia Networks OY			
	37	WO 02/093784	21.11.2002	Qualcomm Inc.			
	38	WO 02/47286	13.06.2002	Nokia Corporation			

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Signature	Considered	

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Substitute for form 1449/PTO	Complete if Known		
	Application Number	10/821,143	
INFORMATION DISCLOSURE	Filing Date	April 7, 2004	
STATEMENT BY APPLICANT	First Named Inventor	Li	
(Use as many sheets as necessary)	Art Unit	2631	
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Sheet 3 of 5	Attorney Docket Number	012.P3001	

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)	39 .	TEW-AP100 11 Mbps Wireless Access Point Product Description; www. trendward.com/products/TEW-AP100.htm; 10/29/01; 4 pages.	
	40	Compaq WL400 11 Mbps Wireless LAN Hardware Access Point Product Description; www.compaq.com/products/wireless/wlan/wl400-specifications.html; 10/29/01; 2 pgs.	
	41	Wireless Protocols: ewd's Valhalla Series Wireless Processors; www. ewdi.com/dp.dpml?dplevel=2; 10/29/01; 2 pages.	
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	47	OLSON, STEVEN C.; "Antenna Technologies for Wireless Solutions"; white paper/presentation; 9/10/98; 35 pages.	
	48	"A Guide to IEEE 802.11b Wireless Networking Technology"; SMART Modular Technologies, Inc. 2001; 32 pages.	

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Examiner	Date	
Signature	Considered	

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	Application Number	10/821,038
INFORMATION DISCLOSURE	Filing Date	April 7, 2004
STATEMENT BY APPLICANT	First Named Inventor	Li
(Use as many sheets as necessary)	Art Unit	2631
,,	Examiner Name	not yet assigned
Sheet 4 of 5	Attorney Docket Number	012.P3002

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Initials*	No. ¹	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	49	SARRIGEORGIDIS et al., "Massively Parallel Wireless Reconfigurable Processor Architecture and Programming", white paper, 8 pages.	
-	50	MAEDA et al., "Blind Signal Separation Via Simultaneous Perturbation Method", white paper, 4 pages.	
	51	RABAEY, Jan M., "Silicon Architectures for Wireless Systems-Part 1", Berkeley Wireless Research Center white paper, 52 pages.	
	52	RABAEY, Jan M., "Silicon Architectures for Wireless Systems-Part 2 Configurable Processors", Berkeley Wireless Research Center white paper, 66 pages.	
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	54	Micronet SP900 Series RadioLink Wireless LAN Product Information Sheet; March 2001; 4 pages.	
	55	DEVLIN, MALACHY Ph.D.; "How to Make Smart Antenna Arrays"; Xcell Journal; Spring 2003, 4 pages.	
	56	"Smart Antenna Technology and Applications" Symposium Presentation, 40 pages.	
	57	ELLINGSON et al., "Open Loop Forward Link Beamforming with Diversity Switching", IEEE Transactions on Vehicular Technology, April 30, 2001, 22 pages.	
	58	TEHRANI, ARDAVAN MALEKI, "Space-Time Coding Over a Code Division Multiple Access System", IEEE 1999, pgs. 134-138.	

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Examiner Initials*	Cite No. ¹	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
-	59	POON et al., "An Adaptive Multi-Antenna Transceiver for Slowly Flat Fading Channels", white paper, 3/13/02, 20 pages.	
	60	LACKPOUR, et al., "Architecture and Predicted Performance of an IEEE 802.11b-like WMAN Transceiver at 5.8GHz", white paper, 7 pages.	
	61	LIU, et al., "A System-Theoretic Foundation For Blind Signal Separation of Mimo-Fir Convolutive Mixtures - A Review", white paper, 7 pages.	
	62	KELLY, RYAN, "A Space Division Multiple Access System - An Analysis and Prototype Proposal, ENEL 698 Final Project Report, 12/17/97, 66 pgs.	
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Examiner	Date	_
Signature	Considered	

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